

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MARYLAND**

CHANGZHOU KAIDI
ELECTRICAL CO., LTD., et al.

v.

OKIN AMERICA, INC., et al.

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Civil No. CCB-13-1798

MEMORANDUM

Among a host of other claims, Changzhou Kaidi Electrical Co. and Kaidi, LLC (together, “Kaidi”) seek a declaratory judgment that the KDPT005 linear actuator in no way infringes any claim of United States Patent Number 5,927,144 (“the ‘144 patent”), which Dewert Okin GmbH owns by assignment and which it and Okin America, Inc. (together, “Okin”) practice via manufacture of the Okin Betadrive linear actuator. Okin, in turn, alleges that the KDPT005 infringes that patent. Okin seek summary judgment on the ground of infringement of claims 1 and 26–28 of the ‘144 patent, while Kaidi seeks summary judgment on the ground of non-infringement of those claims, as well as claim 2. The motions have been fully briefed and no hearing is necessary to their resolution. *See* Local Rule 105.5 (D. Md. 2014). For the reasons explained below, Kaidi’s motion will be granted as to claim 2, on the basis of Okin’s concession, and denied as to the remaining claims.¹ And Okin’s motion will be denied.

BACKGROUND

Okin produces and sells linear actuators, including the Okin Betadrive, throughout the United States. (First Am. Compl. 2–3, ECF No. 24; Answer First Am. Compl. 2, ECF No. 34.)

¹ “In view of the Court’s claim construction ruling, Okin is no longer asserting infringement of dependent claim 2.” (Okin Reply Supp. Partial Summ. J. 12 n.28, ECF No. 87.)

Kaidi produces and imports into the United States linear actuators, including the KDPT005.

(First Am. Compl. 2; Answer First Am. Compl. 2.) Okin claims to own the ‘144 patent, which it claims to practice via the manufacture and sale of its Betadrive. (First Am. Compl. 5; Answer First Am. Compl. 3.) Okin asserts that Kaidi’s KDPT005 infringes claim 1 of the ‘144 patent and one or more of the patent’s other claims, each of which is dependent on claim 1.

(Counterclaim 18–19, ECF No. 34.) Kaidi, in turn, seeks a declaratory judgment that its KDPT005 infringes no valid and enforceable claim of the ‘144 patent, among other causes of action. (First Am. Compl. 8–9.)

After a hearing, this court previously issued a memorandum and order construing components of the claims contained in the ‘144 patent, pursuant to *Markman v. Westview Instruments, Inc.*, 52 F.3d 967 (Fed. Cir. 1995). (ECF Nos. 63, 64.) On the basis of that claim construction, the parties subsequently filed these motions for summary judgment.

ANALYSIS

A. Standard of Review

Under Federal Rule of Civil Procedure 56(a), summary judgment should be granted “if the movant shows that there is no *genuine* dispute as to any *material* fact and the movant is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(a) (emphases added). Whether a fact is material depends upon the substantive law. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). Accordingly, “the mere existence of *some* alleged factual dispute between the parties will not defeat an otherwise properly supported motion for summary judgment.” *Id.* at 247–48. “A party opposing a properly supported motion for summary judgment ‘may not rest upon the mere allegations or denials of [his] pleadings,’ but rather must ‘set forth specific facts

showing that there is a genuine issue for trial.” *Bouchat v. Balt. Ravens Football Club, Inc.*, 346 F.3d 514, 522 (4th Cir. 2003) (alteration in original) (quoting Fed. R. Civ. P. 56(e)). The court must view the evidence in the light most favorable to the nonmovant and draw all reasonable inferences in his favor. *Scott v. Harris*, 550 U.S. 372, 378 (2007) (citation omitted); *see also Greater Balt. Ctr. for Pregnancy Concerns, Inc. v. Mayor & City Council of Balt.*, 721 F.3d 264, 283 (4th Cir. 2013). At the same time, the court must not yield its obligation “to prevent factually unsupported claims and defenses from proceeding to trial.” *Bouchat*, 346 F.3d at 526 (citation and internal quotation marks omitted). Where, as here, both parties have filed cross motions for summary judgment, “the court examines each motion separately, employing the familiar standard under Rule 56 of the Federal Rules of Civil Procedure.” *Desmond v. PNGI Charles Town Gaming, LLC*, 630 F.3d 351, 354 (4th Cir. 2011).

B. Patent Infringement

“[W]hoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States or imports into the United States any patented invention during the term of the patent therefor, infringes the patent.” 35 U.S.C. § 271(a). “[T]o find infringement, the accused device must contain ‘each limitation of the claim’” *TIP Sys., LLC v. Phillips & Brooks/Gladwin, Inc.*, 529 F.3d 1364, 1379 (Fed. Cir. 2008) (quoting *Freedman Seating Co. v. Am. Seating Co.*, 420 F.3d 1350, 1358 (Fed. Cir. 2005)). “[I]nfringement . . . is a question of fact. However, a court may determine infringement on summary judgment ‘when no reasonable jury could find that every limitation recited in the properly construed claim either is or is not found in the accused device.’” *EMD Millipore Corp. v. AllPure Techs., Inc.*, --- F.3d ---, 2014 WL 4800081, at *2 (Fed. Cir. 2014). Kaidi asserts its entitlement to summary judgment on

independent claim 1 and dependent claims 2 and 26–28 of the ‘144 patent, arguing that its KDPT005 linear actuator lacks (1) the “guide section” and (2) the “accepting device” described in those claims.² The first of those arguments fails for want of evidence; the second trips on a misreading of the claims.

1. “Guide Section”

Claim 1 of the ‘144 patent, which is incorporated by reference into claims 2 and 26–28, describes a “guide section” that, among other things, surrounds the actuator’s spindle. *See* Patent ‘144 col.6 ll.13–28. After a hearing on the matter, this court construed that “guide section” as a “two-part component that guides a moving part.” (Mem. 5, ECF No. 63.) Okin identifies two parallel metal components surrounding the KDPT005’s spindle as the requisite two parts of the device’s guide section, highlighting the superficial similarity between those components and drawings of the disclosed embodiment of the patented invention contained in the patent’s specification. Kaidi, however, asserts that the alleged “guide section” of its KDPT005 includes only one component that guides the slider incorporated into that device; it describes the remaining component identified by Okin as a “spindle cover,” “designed to prevent grease from dripping from the spindle and to achieve a decorative effect, not to guide a moving part along a linear path.” (Kaidi Cross-Mot. Partial Summ. J. 6, ECF No. 77-1.) Accordingly, Kaidi concludes, the KDPT005 lacks one of the requisite two parts that make up the patented “guide section” and thus lies beyond the claim’s limitations.

Even assuming Kaidi is correct that each component of the guide section must guide a

² Kaidi offers a third argument, derivative of its first, that the spindle is not “surrounded by a guide section,” as claim 1 requires. Kaidi premises that argument on its assertion that the KDPT005’s “spindle cover” does not constitute a part of its “guide section.” The argument thus rises and falls alongside Kaidi’s contention concerning the “guide section” of its KDPT005. As explained below, those arguments fail together.

moving part, the record does not support the conclusion that the KDPT005's spindle cover does not guide its slider. Most powerfully, Kaidi argues that the KDPT005's "spindle cover lacks the necessary geometric features that allow the guide section to engage with and guide the moving part." (*Id.* at 7.) The exterior of the spindle cover—unlike the guide rail it parallels or drawings of the patent's preferred embodiment included in the specification—is not fashioned into a series of protrusions and depressions that correspond with and touch complementary shapes on the interior of the slider. *Compare, e.g.*, (Kaidi Cross-Mot. Partial Summ. J., Ex. C, Howard Decl. 3 fig.1, ECF No. 77-6), *with, e.g.*, Patent '144 fig.4. "[W]ithout these features," Kaidi maintains, "the spindle cover cannot engage with or guide a moving part." (Kaidi Cross-Mot. Partial Summ. J. at 8.)

Images of the spindle cover and slider, however, belie Kaidi's interpretation of them. True, the exterior of the spindle cover and adjacent shape of the slider lack the intricate detailing of the guide rail or drawings of the preferred embodiment of the invention. (Howard Decl. 3 fig.1.) But the absence of such intricacy is not pertinent to whether the spindle cover is one component of the two part guide section. (*See* Mem. 9 (rejecting Kaidi's argument that, *inter alia*, both of those two parts must have "substantially the same contour cross-sectional shape"), ECF No. 63.) More importantly, the spindle cover's shape *does* complement the shape of the slider; it fits inside two shallow, parallel walls of the slider, the shape of which it mirrors with shallow, parallel walls of its own. Kaidi retorts that, according to technical drawings of the KDPT005, these complementary features of the spindle cover do not *touch* the walls of the slider; approximately 0.2 millimeters should separate them. (Kaidi Reply Supp. Summ. J., Yao Declr. 3, ECF No. 89-5.) Those technical documents do not indicate, however, whether the

slider and spindle cover would come into contact once the slider were placed under stress or in operation. And even if those components were not in continuous contact, their close proximity and complementary shape is highly probative of the spindle cover's capacity to guide the slider. Should the slider deviate from its prescribed path, a jury could conclude, the spindle cover might well help to direct it back.

Kaidi next asserts that the spindle cover has no effect on the slider's movement. Kaidi relies on the declarations of its technical vice president, Butang Yao, and a putative expert, William Howard, who report that the KDPT005's slider "performs just as well both with and without the spindle cover" (Howard Decl. 4; *see also* Kaidi Cross-Mot. Partial Summ. J., Ex. D, Yao Decl. 2, ECF No. 77-7.) Yao's discussion of the matter is restricted to a single conclusory sentence devoid of specific facts, which cannot sustain summary judgment. *See, e.g., Evans v. Techs. Applications & Servs. Co.*, 80 F.3d 954, 962 (4th Cir. 1996) ("[S]ummary judgment affidavits cannot be conclusory."). By contrast, Howard draws his conclusion from testing the performance of the KDPT005 slider with and without the spindle cover and with and without what Kaidi terms the one-part guide. He observed that "there is no difference in the guiding function" when the spindle cover is removed, but that the device "does not perform properly when its guide is removed but the spindle cover remains in place." (*Id.* at 4–5.) Howard notably fails to define his understanding of "proper performance" or any other parameter of his test, which may deprive his declaration of the factual foundation Rule 56 requires. *See, e.g., Novartis Corp. v. Ben Venue Labs., Inc.*, 271 F.3d 1043, 1051 (Fed. Cir. 2001). That question, however, need not be answered here. Even if the spindle cover were neither necessary nor sufficient to the slider's operation, it would not establish that the spindle

cover does not participate in guiding the slider. That is, even if each part of the two-part guide section must guide a moving part, the patent does not require that each of those parts provides such guidance *independent* of the other.

Kaidi next argues that the spindle cover is “not designed to carry a load,” an assertion allegedly corroborated by its relatively thin construction. (Kaidi Cross-Mot. Partial Summ. J. 6.) That argument is not sufficiently supported by either the law or the facts. As to the law, literal infringement of the sort alleged here does not turn on the putative infringer’s intent. *See, e.g., Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 35 (1997). Even were it otherwise—and even assuming that the designers’ intent corresponds with the spindle cover’s function—the spindle cover’s inability to bear a load is not pertinent to its capacity to guide a moving part, which is all the patent requires. (*See* Mem. 6, ECF No. 63 (determining as a matter of law “that the word ‘guide’ [in the patent claim] cannot be interpreted to mean ‘support’”).) As to the facts, Kaidi’s latter-day designation of the component as a “spindle cover” lies in uneasy tension with the lexicon of its internal documents, which predate this litigation. Those documents refer to the “spindle cover” as a “guide rail,” calling into question Kaidi’s description of the intended function of the component. (Okin Reply Supp. Mot. Summ. J., Exs. A, B, D, G.) Kaidi explains that its internal nomenclature is no more than an anachronism, developed in reference to a prior model of the KDPT005 that *did* include a two-part guiding section. Maybe so. But even if this factual issue were relevant, its resolution must await trial, because “[c]redibility determinations, the weighing of the evidence, and the drawing of legitimate inferences from the facts are jury functions, not those of a judge” *McAirlaids, Inc. v. Kimberly-Clark Corp.*, 756 F.3d 307, 310 (4th Cir. 2014) (quoting *Anderson*, 477 U.S. at 255).

For all these reasons, Kaidi has failed to establish the absence of a genuine issue of material fact as to the spindle cover's function. If it guides a moving part, then a jury could conclude that it constitutes one component of the two-part guide section described in the patent's claims. Because genuine questions of material fact as to the function of the spindle cover remain unresolved, Okin's motion for summary judgment also fails.³

2. "Accepting Device"

Claim 1 of the '144 patent is also limited by its reference to "an accepting device for connection to an adjuster for adjusting the movable part of the seating or reclining furniture being provided on the housing" Patent '144 col.6 ll.19–21. The parties previously conceded—and this court agreed—that "adjuster" and "slider" are synonyms for purposes of the patent. (Mem. 6 n.8, ECF No. 63.) Relying largely on the preferred embodiment illustrated in the patent's specification, Okin identifies a feature on the housing of the KDPT005 as the accepting device described in the claim limitation. Crucially, that feature lies on the opposite side of the housing from the device's slider, spindle, guide, and alleged spindle cover; it does not touch the slider. Highlighting the distal relationship between the accepting device and the slider, Kaidi claims that the accepting device cannot be "for connection to" that slider, as the claim's limitation requires.

a. Claim Construction

"A determination of patent infringement, even on summary judgment, requires a two-step analysis, the first of which is claim construction." *Baron Servs., Inc. v. Media Weather*

³ By the same token, Kaidi's derivative argument—that the guide section of its KDPT005 does not surround that device's spindle, as the patent claims require—also fails. As noted, Kaidi grounds that argument in its assertion that the spindle cover does not constitute a part of the KDPT005's guide section. Because genuine questions of material fact concerning that premise remain unresolved, summary judgment on this derivative argument is equally improper.

Innovations LLC, 717 F.3d 907, 914 n.13 (Fed. Cir. 2013). Although this court previously held a hearing and issued an order addressing that preliminary question, it now arises again. In a joint statement filed before the previous claim construction hearing in this case, both parties agreed that the phrase “for connection” means “for joining together, uniting, or linking” and accordingly did not seek judicial construction of it. (Joint Claim Construction Statement 4, ECF No. 44.) Now, however, they raise a dispute concerning that phrase, which requires judicial resolution. *See Pressure Prods. Med. Supplies, Inc. v. Greatbatch Ltd.*, 599 F.3d 1308, 1316 (Fed. Cir. 2010). Although the parties’ belated recognition of the importance of this issue is unfortunate, it is neither unusual nor unexpected. *Cf. SanDisk Corp. v. Memorex Prods., Inc.*, 415 F.3d 1278, 1291 (Fed. Cir. 2005) (noting that, as a case progresses, “the court expects the parties to refine the disputed issues and learn more about the claim terms and technology, at which point a more accurate claim construction can be attempted”).

On Okin’s reading, the phrase “for connection to” embraces “indirect connections such as ‘linking’ and ‘joining.’” (Okin Reply Supp. Mot. Partial Summ. J. 10, ECF No. 87.) That interpretation is consistent not only with the plain meaning of the claim, but also with the “fully integrated written instrument” in which that claim appears. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1315 (Fed. Cir. 2005) (quoting *Markman*, 52 F.3d at 978). As Okin points out, to interpret “for connection to” as *excluding* indirect connections would also exclude the preferred embodiment of the invention, which the specification describes in text and illustrations, because the accepting device and slider do not touch in any of those figures. “[A] construction that excludes a preferred embodiment ‘is rarely, if ever, correct and would require highly persuasive evidentiary support.’” *Starhome GmbH v. A.T. & T. Mobility LLC*, 743 F.3d 849, 857 (Fed. Cir.

2014) (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1583 (Fed. Cir. 1996)).

Kaidi cannot clear that high evidentiary hurdle. It invokes the rule that courts “construe the claim as written, not as the patentees wish they had written it.” *Chef Am., Inc. v. Lamb-Weston, Inc.*, 358 F.3d 1371, 1374 (Fed. Cir. 2004). That rule, however, begs the question without answering it, for “claims ‘must be read in view of the specification of which they are a part,’” *Phillips*, 415 F.3d at 1315 (*Markman*, 52 F.3d at 979), including the embodiments the specification describes and depicts. For this reason, courts avoid “interpreting a claim term in a way that excludes disclosed embodiments[] when that term has multiple ordinary meanings consistent with the intrinsic record.” *Helmsderfer v. Bobrick Washroom Equip., Inc.*, 527 F.3d 1379, 1383 (Fed. Cir. 2008). Only “when the claims are susceptible to only one reasonable construction” will courts construe a claim to exclude an embodiment described in the specification. *Lucent Technologies, Inc. v. Gateway, Inc.*, 525 F.3d 1200, 1215 (Fed. Cir. 2008).⁴ *Helmsderfer*, for example, rejected a patentee’s proposal to construe the phrase “partially hidden from view” to include items *totally* hidden from view, notwithstanding embodiments in the specification that were consistent with the patentee’s proposal but excluded by the court’s construction. 527 F.3d at 1382–83. *Helmsderfer* reasoned that *partially* and *totally* were near antonyms, such that the former term specifically excluded the latter. *Id.* By contrast, *Hill-Rom Services, Inc. v. Stryker Corp.*, 755 F.3d 1367, 1378–79 (Fed. Cir. 2014), rejected an alleged infringer’s construction of the phrase “message validation information” as

⁴ The case on which Kaidi relies, *Chef America, Inc. v. Lamb-Weston, Inc.*, 358 F.3d 1371 (Fed. Cir. 2004), is consistent with this rule, although it did not concern a proposed claim construction that would exclude a preferred embodiment described in the patent specification. That case construed a patent claim requiring “heating . . . batter-coated dough to 400° F. to 850° F.” That phrase, *Chef America* held, referred to the required temperature of *the dough*, not the oven, even if the resulting product “would be burned to a crisp.” *Id.* “[W]here as here,” *Chef America* reasoned, “claims are susceptible to only one reasonable interpretation and that interpretation results in a nonsensical construction of the claim as a whole, the claim must be invalidated.” *Id.* at 1374 (quoting *Process Control Corp v. HydReclaim Corp.*, 190 F.3d 1350, 1357 (Fed. Cir. 1999)).

requiring verification that a received message constituted a 100% accurate duplicate of a sent message. Although one portion of the specification “suggest[ed] that the verification should determine whether exactly the same message was sent [as was received],” *Hill-Rom* reasoned that such a construction might exclude the embodiment described in the specification. *Id.* Given ambiguity in the term “validation” and the specification, *Hill-Rom* preferred a construction that preserved the disclosed embodiment to one that arguably did not.

So, too, here. The term “for connection to” is susceptible to at least two constructions: it might mean both “for *indirect* connection to” and “for *direct* connection to.” Either adjective—*indirect* or *direct*—can be interpolated into the phrase with no violence to standard usage. Unlike the phrase construed in *Helmsderfer*, the language of the claim does not specifically exclude either of these modifications.

Kaidi argues otherwise, drawing on dictionary definitions of the terms it and Okin previously agreed would serve as a gloss on the phrase “for connection”—namely, “for joining together, uniting, or linking.” Even assuming reliance on such extrinsic sources is permissible, *see Helmsderfer*, 527 F.3d at 1382–83 (employing dictionary definitions to construe “partially”), they do not support Kaidi’s position. Kaidi first defines “linking” as “to join by or as if by a link or links; connect; unite.” (Kaidi Reply Supp. Summ. J. 9 (quoting *Webster’s Unabridged Dictionary* 1119 (2d ed. 2001))). But to join by links, plural, necessarily implies a series of objects *indirectly* connecting two items, insofar as a link is no more than “one of the rings or separate pieces of which a chain is composed.” *Webster’s Unabridged Dictionary* 1119 (2d ed. 2001). Kaidi next defines “join” as “to bring into contact, connect, or put together” and “to come into contact or union with.” (Kaidi Reply Supp. Summ. J. 9 (quoting *Webster’s Unabridged*

Dictionary 1032 (2d ed. 2001)). At best, that definition implies that “joined” items must touch. But the selfsame dictionary on which Kaidi relies also indicates that such a connotation is common but not *necessary* to the word “join.” *Webster’s Unabridged Dictionary* 1032 (2d ed. 2001) (“JOIN may refer to a connection or association *of any degree of closeness*, but often implies direct contact.” (emphasis added)). Because the verb does not expressly exclude a non-contiguous relation, it can be as easily modified to mean “to join *indirectly*” as “to join *directly*.”

Indeed, Kaidi’s own argument suggests that indirect connections between the accepting device and slider would satisfy the language of the claim. Presumably in an effort to avoid violating the presumption against constructions that exclude embodiments disclosed in the specification, Kaidi suggests that its construction would *not* necessarily exclude all depictions of the preferred embodiment of the invention. For support, Kaidi emphasizes several figures included in the specification, which depict “links between the accepting device and the slider” that other depictions of the preferred embodiment allegedly lack. (Kaidi Reply Supp. Summ. J. 11 (emphasis added) (citing Patent ‘144 fig.11); *see also* Patent ‘144, figs.12–13.) Those figures do not, however, indicate that the accepting device and slider are *directly* connected. To the contrary, they depict connections via a series of intervening components—that is, *indirect* connections. Figure 11, for example, indicates that the holding device and slider are connected via what the specification describes as a “additional auxiliary frame,” a “holding arm,” a “fork,” and a “shaft.” Patent ‘144 fig.11. Likewise, Figure 12 depicts a connection via a “holding arm,” “auxiliary frame,” and “hinged fork.” Patent ‘144 fig.12. If there is any material difference between an indirect connection via such intermediate components and an indirect connection via the actuator’s housing and guide section—which all relevant depictions of the preferred

embodiment include—then Kaidi has not yet identified it.

For all these reasons, the phrase “for connection to” embraces indirect connections via a series of intermediate objects.

b. Infringement Analysis

Having construed the phrase “for connection to” as embracing indirect connections via a series of intermediate objects, all that remains is application of that construction to the KDPT005. *See, e.g., Markman*, 52 F.3d at 976. Images of that device, as well as physical inspection of it, confirm that the claimed accepting device appears to be connected to the slider via the housing and guide section, at the very least. On that basis, a jury could conclude that the accepting devices is “for connection to” the slider, as the claim requires. Summary judgment for Kaidi will thus be denied. The court need not—and will not—decide whether Okin’s proffered evidence conclusively resolves this issue in its favor, because summary judgment for Okin is improper in light of outstanding questions of fact concerning the function of the spindle cover, as noted. *See supra* Part B.1.

CONCLUSION

For the reasons stated above, Kaidi’s motion will be granted as to claim 2 of the ‘144 patent and denied in all other respects. And Okin’s motion will be denied.⁵

A separate order follows.

October 3, 2014
Date

/S/
Catherine C. Blake
United States District Judge

⁵ In addition, the parties have filed several unopposed motions to seal documents appended as exhibits to their pleadings. (*See* ECF Nos. 73, 79, 85, 91.) Those motions will be granted, except to the extent that reference to any sealed material has been necessary to explain the results reached in this memorandum opinion.